



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/774,871 | 02/09/2004 | Brant L. Candelore | SNY-T5714.02 | 8806 |

| | | |
|--|------|------------|
| 24337 | 7590 | 10/29/2007 |
| MILLER PATENT SERVICES 2500 DOCKERY LANE RALEIGH, NC 27606 | | |

| | |
|-----------------|--|
| EXAMINER | |
| SCHNURR, JOHN R | |

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
| 2623 | |

| | |
|------------|---------------|
| MAIL DATE | DELIVERY MODE |
| 10/29/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/774,871 | CANDELORE ET AL. | |
| | Examiner | Art Unit | |
| | John R. Schnurr | 2623 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,8-12,15-18,23,28-35 and 58-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,8-12,15-18,23,28-35 and 58-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :4/26/2004, 11/03/2004, 03/15/2005, 06/03/2005, 07/29/2005, 08/22/2005, 10/28/2005, 11/10/2005, 01/30/2006, 04/25/2006, 07/24/2006, 10/30/2006, 2/12/2007, 5/17/2007, 6/29/2007, 9/04/2007 .

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 8-12, 15-18, 23, 28-35 and 58-62 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claims 15-17 are objected to because of the following informalities: The claims indicate dependence from cancelled claim 13. For the purposes of examination claims 15-17 were assumed to be dependent from claim 1. Appropriate correction is required.

3. Claim 62 is objected to because of the following informalities: The claim indicates dependence from claim 583. For examination purposes the claim was assumed to be dependent from claim 58. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims **1, 9, 10, 16, 29, 32, 33, 58 and 60** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lu (US Patent Application Publication 2002/0157115)** in view of **Pinder et al. (US Patent Application Publication 20040139337)**, herein Pinder, and further in view of **Chen et al. (US Patent 5,917,830)**, herein Chen.

Consider **claims 1 and 23**, Lu clearly teaches a method of manipulating a stream of data in a CableCard device comprising:

Art Unit: 2623

receiving a stream of data from a host, **(Fig. 3: POD module 300 receives a signal at INB interface 265, [0033].)**

decrypting selected encrypted packets; **(Fig. 3: Transport processing, filtering and routing circuitry 250 decodes the signal, [0041].)**

sending the stream back to the host; **(Fig. 3: INB interface 265 routes signals back to the host, [0041].)**

However, Lu does not explicitly teach the signals being received is a selectively encrypted signal with encrypted packets having a PID different from the PIDs of the non-encrypted packets.

In an analogous art, Pinder, which discloses a system for providing a video signal to a client device, clearly teaches selectively encrypting a signal, wherein encrypted packets have a PID different from the PIDs of the non-encrypted packets. **(Fig. 7: Critical packet selector 725 allows unencrypted packets of clear stream C to pass through to MUX 740 until a critical packet is encountered at which time switch 730 routes the packet through scrambler B to PID remapper 750 which assigns a new PID to the encrypted packet, [0038].)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Lu by receiving a partially encrypted stream, with encrypted and non-encrypted packets having different PIDs, at the client device, as taught by Pinder, for the benefit of allowing client devices utilizing different encryption schemes to operate on the same network without consuming twice the original bandwidth ([0022] Pinder).

However, Lu combined with Pinder does not explicitly teach a method of combining the packets containing different PIDs, specifically:

selecting certain of the packets for remapping of the packet identifiers associated with the selected packets;

remapping the packet identifiers of the selected packets so that the packets are associated with a new packet identifier, and wherein the new packet identifier is a packet identifier used by certain of the unencrypted packets;

re-encrypting the decrypted packets and the certain of the encrypted packets, wherein the decrypted packets, and the certain of the encrypted packets comprise packets that have the new packet identifier

Art Unit: 2623

In an analogous art, Chen, which discloses a system for providing video programming, clearly teaches remapping secondary PIDs to a primary PID in a client device, (**column 21 line 65 to column 22 line 2**), specifically:

selecting certain of the packets for remapping of the packet identifiers associated with the selected packets; (**Fig. 4: ISP 420 determines which packets to remap using T_{in} and T_{out}, column 6 lines 6-12.**)

remapping the packet identifiers of the selected packets so that the packets are associated with a new packet identifier, and wherein the new packet identifier is a packet identifier used by certain of the unencrypted packets; (**Fig. 4: The ISP 420 sends the selected packets to PID replacer 435 to be mapped to the main stream PID, column 6 lines 36-41. The main stream is unencrypted, column 5 lines 33-35.**)

re-encrypting the decrypted packets and the certain of the encrypted packets, wherein the decrypted packets, and the certain of the encrypted packets comprise packets that have the new packet identifier (**column 5 lines 41-44.**)

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Lu combined with Pinder by remapping secondary PIDs to a primary PID in a client device, as taught by Chen, for the benefit of inserting messages into a video stream (column 4 lines 51-62 Chen).

Consider **claim 58**, Lu combined with Pinder and Chen, as in claims 1 and 23, clearly teaches the limitations common to claims 1, 23 and 58. Chen further teaches remapping packets to substitute packets in the stream of data on a packet for packet basis. (**column 8 lines 1-5 Chen**)

Consider **claims 9 and 32**, Lu combined with Pinder and Chen, as in claims 1 and 23, clearly teaches the remapping comprises remapping packets to substitute packets in the stream of data on a packet for packet basis. (**column 8 lines 1-5 Chen**)

Consider **claims 10 and 33**, Lu combined with Pinder and Chen, as in claims 1 and 23, clearly teaches the remapping comprises remapping packets to provide for insertion of a packet into the stream of data. (**column 8 lines 1-5 Chen**)

Consider **claims 16, 29 and 60**, Lu combined with Pinder and Chen, as in claims 1, 23 and 58, clearly teaches the remapping is carried out after the decrypting. (**Fig. 1: Storage unit 135 may be a DVD, which stores encrypted data, column 4 lines 41-44, the inserted message is a compressed digital**

Art Unit: 2623

packetized stream, column 4 lines 63-65, therefore decryption must have taken place before the remapping.)

6. Claims **8, 18, 28, 31 and 62** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lu (US Patent Application Publication 2002/0157115)** in view of **Pinder et al. (US Patent Application Publication 20040139337)** further in view of **Chen et al. (US Patent 5,917,830)**, as applied to claims 1, 23 and 58 above, and further in view of **Safadi (US Patent 6,883,050)**.

Consider **claims 8, 18, 28, 31 and 62**, Lu combined with Pinder and Chen, as in claims 1, 23 and 58, clearly teaches a method of manipulating a stream of data in a CableCard device.

However, Lu combined with Pinder and Chen does not explicitly teach the CableCard being OpenCable compliant.

In an analogous art Safadi, which discloses a system for interfacing a POD and a host device, clearly teaches using an OpenCable compliant POD. **(Column 2 lines 16-33)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Lu combined with Pinder and Chen by using an OpenCable compliant POD, as taught by Safadi, for the benefit of allowing fast efficient data sharing between the POD and host (see column 2 lines 32-33 Safadi).

7. Claims **11, 12, 34 and 35** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lu (US Patent Application Publication 2002/0157115)** in view of **Pinder et al. (US Patent Application Publication 20040139337)** further in view of **Chen et al. (US Patent 5,917,830)**, as applied to claims 1 and 23 above, and further in view of **Hodges et al. (US Patent Application Publication 2003/0046687)**, herein Hodges.

Art Unit: 2623

Consider **claims 11, 12, 34 and 35**, Lu combined with Pinder and Chen, as in claims 1 and 23, clearly teaches a method of manipulating a stream of data in a CableCard device by replacing packets.

However, Lu combined with Pinder and Chen does not explicitly teach inserting multiple packets for one packet or one packet for multiple packets.

In an analogous art Hodges, which discloses a system for manipulating digital programming, clearly teaches inserting multiple packets for one packet or one packet for multiple packets. **(Substitute content can be of any duration, [0024])**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Lu combined with Pinder and Chen by inserting multiple packets for one packet or one packet for multiple packets, as taught by Hodges, for the benefit of substituting content without affecting production quality (see [0003]-[0006]).

8. Claims **15, 17, 30, 59 and 61** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lu (US Patent Application Publication 2002/0157115)** in view of **Pinder et al. (US Patent Application Publication 20040139337)** further in view of **Chen et al. (US Patent 5,917,830)**, as applied to claims 1, 23 and 58 above, and further in view of **Hobrock et al. (US Patent Application Publication 2004/0247122)**, herein Hobrock.

Consider **claims 15, 17, 30, 59 and 61**, Lu combined with Pinder and Chen, as in claims 1, 23 and 58, clearly teaches a method of manipulating a stream of data in a CableCard device, wherein the packets to be remapped come from an encrypted source. **(Fig. 1: Storage unit 135 includes DVDs, column 4 lines 41-44 Chen.)**

However, Lu combined with Pinder and Chen does not explicitly teach remapping encrypted packets.

In an analogous art Hobrock, which discloses a system for decrypting encrypted transport streams, clearly teaches remapping encrypted packets. **([0061]-[0062])**

Art Unit: 2623

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Lu combined with Pinder and Chen by remapping encrypted packets, as taught by Hobrock, for the benefit of decoding multiple transport streams using a single decoder (see [0047]-[0048] Hobrock).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R. Schnurr whose telephone number is (571) 270-1458. The examiner can normally be reached on Monday - Friday, 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone

Art Unit: 2623

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JRS


CHRISTOPHER GRANT
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600